

10 / 518,887

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	488	(544/400,544/336).CCLS.	US-PGPUB; USPAT	OR	OFF	2007/08/14 15:57
L2	209	I1 and piperazine	US-PGPUB; USPAT	OR	ON	2007/08/14 15:58
L3	68	I1 and piperazin!	US-PGPUB; USPAT	OR	ON	2007/08/14 15:58
L4	50	I3 and dimethyl	US-PGPUB; USPAT	OR	ON	2007/08/14 15:58
L5	49	I4 and phenyl	US-PGPUB; USPAT	OR	ON	2007/08/14 15:58
L6	17	I5 and acetamide	US-PGPUB; USPAT	OR	ON	2007/08/14 15:59
L7	0	I6 and lidocaine	US-PGPUB; USPAT	OR	ON	2007/08/14 15:59
L8	1	I6 and haloacetyl	US-PGPUB; USPAT	OR	ON	2007/08/14 16:00
L9	0	I8 and xylidine	US-PGPUB; USPAT	OR	ON	2007/08/14 16:00

10/518,887
~~10/513699~~

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Welcome to STN International! Enter x:x

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TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS 1 Web Page for STN Seminar Schedule - N. America
NEWS 2 MAY 01 New CAS web site launched
NEWS 3 MAY 08 CA/CAPplus Indian patent publication number format defined
NEWS 4 MAY 14 RDISCLOSURE on STN Easy enhanced with new search and display fields
NEWS 5 MAY 21 BIOSIS reloaded and enhanced with archival data
NEWS 6 MAY 21 TOXCENTER enhanced with BIOSIS reload
NEWS 7 MAY 21 CA/CAPplus enhanced with additional kind codes for German patents
NEWS 8 MAY 22 CA/CAPplus enhanced with IPC reclassification in Japanese patents
NEWS 9 JUN 27 CA/CAPplus enhanced with pre-1967 CAS Registry Numbers
NEWS 10 JUN 29 STN Viewer now available
NEWS 11 JUN 29 STN Express, Version 8.2, now available
NEWS 12 JUL 02 LEMBASE coverage updated
NEWS 13 JUL 02 LMEDLINE coverage updated
NEWS 14 JUL 02 SCISEARCH enhanced with complete author names
NEWS 15 JUL 02 CHEMCATS accession numbers revised
NEWS 16 JUL 02 CA/CAPplus enhanced with utility model patents from China
NEWS 17 JUL 16 CAPplus enhanced with French and German abstracts
NEWS 18 JUL 18 CA/CAPplus patent coverage enhanced
NEWS 19 JUL 26 USPATFULL/USPAT2 enhanced with IPC reclassification
NEWS 20 JUL 30 USGENE now available on STN
NEWS 21 AUG 06 CAS REGISTRY enhanced with new experimental property tags
NEWS 22 AUG 06 BEILSTEIN updated with new compounds
NEWS 23 AUG 06 FSTA enhanced with new thesaurus edition
NEWS 24 AUG 13 CA/CAPplus enhanced with additional kind codes for granted patents

NEWS EXPRESS 29 JUNE 2007: CURRENT WINDOWS VERSION IS V8.2,
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 05 JULY 2007.

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 13:34:51 ON 14 AUG 2007

=> file re

'RE' IS AN AMBIGUOUS FILE OR CLUSTER NAME

REACTION - Reactions Cluster

RESEARCH - Research Cluster

REGISTRY - The CAS Registry File of substances

ENTER FILE OR CLUSTER NAME (IGNORE):file reg

'FILE' IS NOT A VALID FILE NAME

Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files that are available. If you have requested multiple files, you can specify a corrected file name or you can enter "IGNORE" to continue accessing the remaining file names entered.

ENTER A FILE NAME OR (IGNORE):

ENTER A FILE NAME OR (IGNORE):.

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION

FULL ESTIMATED COST

0.21	0.21
------	------

FILE 'REGISTRY' ENTERED AT 13:35:11 ON 14 AUG 2007

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STRUCTURE FILE UPDATES: 13 AUG 2007 HIGHEST RN 944501-68-2

DICTIONARY FILE UPDATES: 13 AUG 2007 HIGHEST RN 944501-68-2

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TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=> file reg

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION

FULL ESTIMATED COST

0.45	0.66
------	------

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STRUCTURE FILE UPDATES: 13 AUG 2007 HIGHEST RN 944501-68-2
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<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

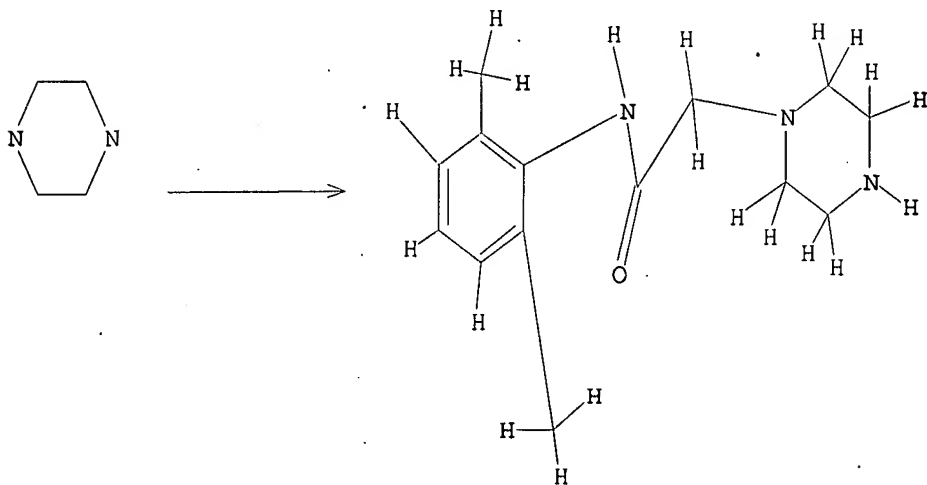
Uploading C:\Program Files\Stnexp\Queries\10518887casreact.str

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 full

MULTIPLE ROLE QUERIES ARE NOT ALLOWED IN A NON-REACTION FILE

=> s l1

MULTIPLE ROLE QUERIES ARE NOT ALLOWED IN A NON-REACTION FILE

=> file casreact

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

<12/04/2007>

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	ENTRY	SESSION
FULL ESTIMATED COST	1.80	2.46

FILE 'CASREACT' ENTERED AT 13:37:36 ON 14 AUG 2007
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FILE CONTENT:1840 - 11 Aug 2007 VOL 147 ISS 8

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```
*****
*
*   CASREACT now has more than 12 million reactions
*
*****
```

Some CASREACT records are derived from the ZIC/VINITI database (1974-1999) provided by InfoChem, INPI data prior to 1986, and Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=>

Uploading C:\Program Files\Stnexp\Queries\10518887casreact.str

L2 STRUCTURE UPLOADED

=> s l2 full

FULL SEARCH INITIATED 13:38:37 FILE 'CASREACT'
SCREENING COMPLETE - 362 REACTIONS TO VERIFY FROM 37 DOCUMENTS

100.0% DONE 362 VERIFIED 13 HIT RXNS 8 DOCS
SEARCH TIME: 00.00.01

L3 8 SEA SSS FUL L2 (13 REACTIONS)

=> d ibib abs hitstr tot

'HITSTR' IS NOT A VALID FORMAT FOR FILE 'CASREACT'

The following are valid formats:

ABS ----- GI and AB
ALL ----- BIB, AB, IND, RE, Single-step Reactions
APPS ----- AI, PRAI
BIB ----- AN, plus Bibliographic Data
CAN ----- List of CA abstract numbers without answer numbers
CBIB ----- AN, plus Compressed Bibliographic Data
DALL ----- ALL, delimited (end of each field identified)
IABS ----- ABS, indented with text labels
IALL ----- ALL, indented with text labels
IBIB ----- BIB, indented with text labels
IND ----- Indexing data

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IPC ----- International Patent Classifications
ISTD ----- STD, indented with text labels
OBIB ----- AN, plus Bibliographic Data (original)
OIBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations
SIBIB ----- IBIB, no citations

MAX ----- Same as ALL
PATS ----- PI, SO
SCAN ----- TI and FCRD (random display, no answer number. SCAN
must be entered on the same line as DISPLAY, e.g.,
D SCAN.)
SSRX ----- Single-Step Reactions (Map, Diagram, and Summary for
all single-step reactions)
STD ----- BIB, IPC, and NCL

CRD ----- Compact Display of All Hit Reactions
CRDREF ----- Compact Reaction Display and SO, PY for Reference
FHIT ----- Reaction Map, Diagram, and Summary for first
hit reaction
FHITCBIB --- FHIT, AN plus CBIB
FCRD ----- First hit in Compact Reaction Display (CRD) format
FCRDREF ----- First hit in Compact Reaction Display (CRD) format with
CA reference information (SO, PY). (Default)
FPATH ----- PATH, plus Reaction Summary for the "long path"
FSPATH ----- SPATH, plus Reaction Summary for the "short path"
HIT ----- Reaction Map, Reaction Diagram, and Reaction
Summary for all hit reactions and fields containing
hit terms
OCC ----- All hit fields and the number of occurrences of the
hit terms in each field. Includes total number of
HIT, PATH, SPATH reactions. Labels reactions that have
incomplete verifications.
PATH ----- Reaction Map and Reaction Diagram for the "long
path". Displays all hit reactions, except those
whose steps are totally included within another hit
reaction which is displayed
RX ----- Hit Reactions (Map, Diagram, Summary for all hit reactions)
RXG ----- Hit Reaction Graphics (Map and Diagram for all hit reactions)
RXL ----- Hit Reaction Long (Map, Diagram, Summary for all hit reactions)
RXS ----- Hit Reaction Summaries (Map and Summary for all hit reactions)
SPATH ----- Reaction Map and Reaction Diagram for the "short
path". Displays all single step reactions which
contain a hit substance. Also displays those
multistep reactions that have a hit substance in both
the first and last steps of the reaction, except for
those hit reactions whose steps are totally included
within another hit reaction which is displayed

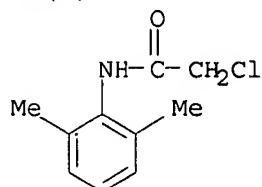
To display a particular field or fields, enter the display field
codes. For a list of the display field codes, enter HELP DFIELDS
at an arrow prompt (=>). Examples of combinations include: D TI;
D BIB RX; D TI, AU, FCRD. The information is displayed in the same order
as the specification. All of the formats, except CRD, CRDREF, FHIT, PATH,
FPATH, SPATH, FSPATH, FCRD, FCRDREF, HIT, RX, RXG, RXS, SCAN, and OCC, may
be used with the DISPLAY command to display the record for a specified
Accession Number.

10/513699

ENTER DISPLAY FORMAT (FCRDREF):.

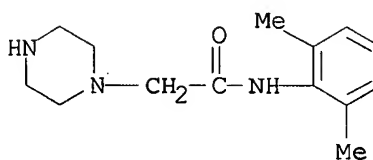
L3 ANSWER 1 OF 8 CASREACT COPYRIGHT 2007 ACS on STN

RX(3) OF 10



(step 1)

1. Piperazine, EtOH
2. NH4OH, Water



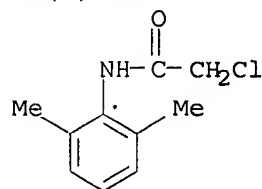
71%

REF: Faming Zhuanli Shenqing Gongkai Shuomingshu, 1915982, 21 Feb 2007

CON: STAGE(1) 4 hours, reflux
STAGE(2) pH 8 - 9

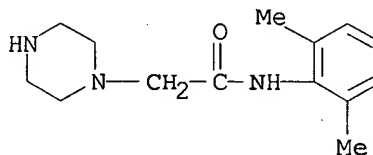
L3 ANSWER 2 OF 8 CASREACT COPYRIGHT 2007 ACS on STN

RX(3) OF 17



(step 1)

1. Piperazine, EtOH
2. NH3, Water



75%

REF: Zhongguo Yaowu Huaxue Zazhi, 13(5), 283-285; 2003

CON: STAGE(1) 4 hours, reflux; reflux -> room temperature
STAGE(2) pH 8 - 9

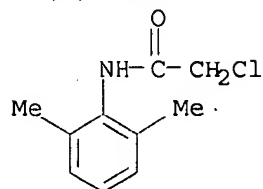
L3 ANSWER 3 OF 8 CASREACT COPYRIGHT 2007 ACS on STN

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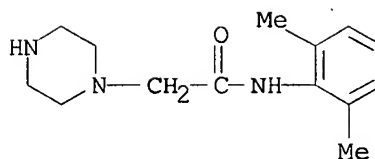
10/513699

RX(3) OF 10



(step 1)

1. Piperazine, EtOH
2. NH₃, Water



61%

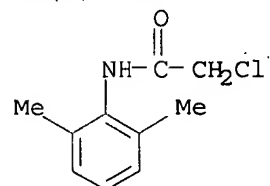
REF: Zhongguo Yiyao Gongye Zazhi, 35(11), 641-642; 2004

CON: STAGE(1) 3 hours, room temperature -> reflux

STAGE(2) pH 10

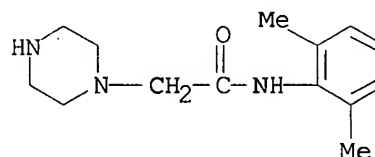
L3 ANSWER 4 OF 8 CASREACT COPYRIGHT 2007 ACS on STN

RX(9) OF 51



(step 1)

1. Piperazine, Et₂O
2. NH₃, Water



REF: Biocatalysis and Biotransformation, 23(1), 45-51; 2005

CON: 2 hours, reflux

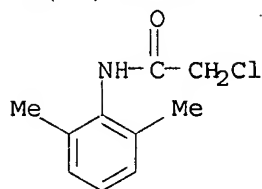
L3 ANSWER 5 OF 8 CASREACT COPYRIGHT 2007 ACS on STN

<12/04/2007>

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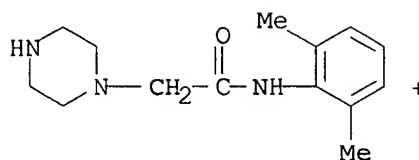
10/513699

RX(57) OF 144

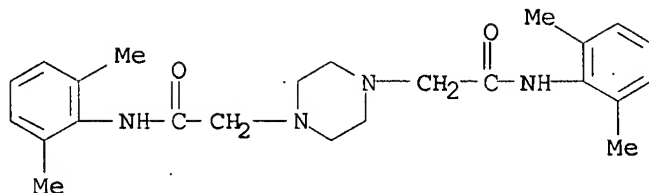


(step 1)

1. Piperazine, Na2CO3,
THF
2. KOH



RX(57) OF 144



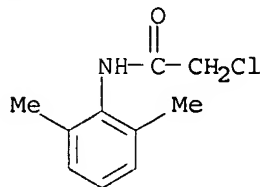
REF: PCT Int. Appl., 2005025498, 24 Mar 2005

CON: STAGE(1) 3 days, room temperature

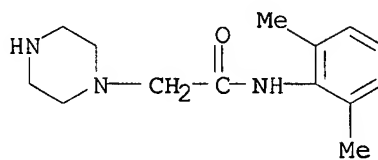
STAGE(2) room temperature, basify

L3 ANSWER 6 OF 8 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 10



Piperazine, PhMe



71%

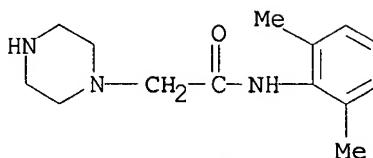
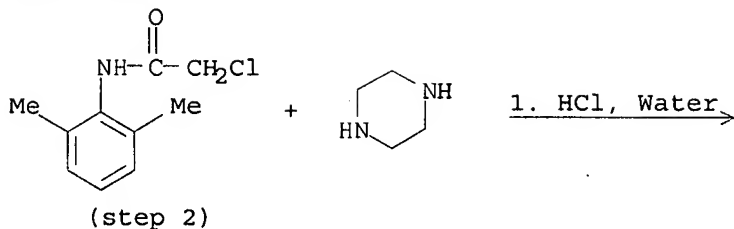
REF: Guangxi Daxue Xuebao, Ziran Kexueban, 28(4), 301-303; 2003

CON: 3 hours, 80 - 90 deg C

L3 ANSWER 7 OF 8 CASREACT COPYRIGHT 2007 ACS on STN

10/513699

RX(1) OF 1



68%

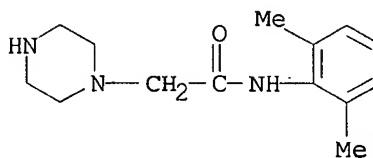
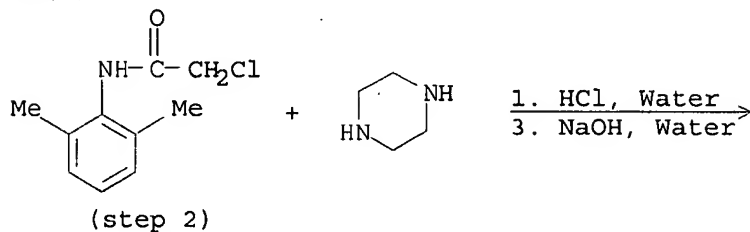
REF: PCT Int. Appl., 2004000824, 31 Dec 2003

NOTE: optimization study

CON: STAGE(1) room temperature -> 45 deg C; 45 deg C -> 25 deg C
STAGE(2) 80 deg C; 2 hours

L3 ANSWER 8 OF 8 CASREACT COPYRIGHT 2007 ACS on STN

RX(1) OF 1



70%

REF: Organic Process Research & Development, 7(6), 939-941; 2003

NOTE: safety, optimization study, optimized on solvent, time, stoichiometry, HCl amount, pilot-plant, scalable

CON: STAGE(1) room temperature -> 45 deg C; 45 deg C -> 25 deg C
STAGE(2) 25 deg C -> 80 deg C; 2 hours, 80 deg C;
80 deg C -> 60 deg C
STAGE(3) 60 deg C, pH >10

=> d his

(FILE 'HOME' ENTERED AT 13:34:51 ON 14 AUG 2007)

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FILE 'REGISTRY' ENTERED AT 13:35:11 ON 14 AUG 2007

L1 FILE 'REGISTRY' ENTERED AT 13:35:13 ON 14 AUG 2007
STRUCTURE UPLOADED

L2 FILE 'CASREACT' ENTERED AT 13:37:36 ON 14 AUG 2007
STRUCTURE UPLOADED
L3 8 S L2 FULL